

**LUMMI NATION
SPILL PREVENTION AND RESPONSE CAPABILITY
DEVELOPMENT**

2012 Annual Synthesis Report



Prepared For:
Lummi Indian Business Council

Prepared By:
Water Resources Division
Lummi Natural Resources Department

January 2013

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Introduction

Large amounts of crude oil, petroleum products, and other hazardous materials are transported and stored near the Lummi Indian Reservation. These hazardous materials are transported by ships, pipelines, trucks, and railroad and are used, produced, and/or stored throughout the Reservation area, particularly in the Cherry Point Heavy Impact Industrial Zone immediately north of the Reservation boundary. Accidents, equipment failure, and human error have the potential to result in large spills and disastrous human and environmental consequences. Many of these hazardous materials are toxic to people and animals if inhaled or contacted. Oil and chemical spills or releases to waters on or adjacent to the Reservation have the potential to threaten public health and safety and destroy some of the most productive and valuable ecosystems in the world. Spills or releases of petroleum products, chemicals, or other hazardous materials to land can threaten public safety, public health, and the environment. To date, there has not been a large hazardous material spill on the Reservation that has impacted Lummi Nation Waters. However, future residential and economic growth on the Reservation, in the adjacent Cherry Point Heavy Impact Industrial Zone, and in areas upstream from the Reservation will increase the risk of a hazardous material emergency on the Reservation.

Because of the potential consequences, it is important for the Lummi Nation to develop and implement a plan to effectively respond to a hazardous material spill or release on or adjacent to the Reservation. The Lummi Natural Resources Department has been actively developing spill response capabilities since the mid-1990s and completed the Lummi Nation Spill Prevention and Response Plan in October 2005 (LWRD 2005). Continuing efforts to develop spill prevention and response capabilities include staff training and spill response drills, equipment upgrades, planning, research, and public outreach. These efforts contribute to achieving the Lummi Nation goals of protecting the public health and safety of Reservation residents and protecting treaty rights to fish and gather throughout all usual and accustomed areas. These activities also contribute to achieving the EPA strategic goals of clean and safe water and healthy communities and ecosystems.

This annual synthesis report is a summary of the Lummi Nation spill prevention and response capability development activities conducted during the January 1, 2012 through December 31, 2012 period. The activities are divided into the following categories: Staff Training and Oil Spill Response Drills, Equipment, Oil Spill Response Incidents, Public Outreach, and Data Collection/Research.

Spill Prevention and Response Capability Development Activities

1. Staff Training and Oil Spill Response Drills:

Spill prevention and response training for staff members is conducted through dedicated classes, table-top exercises, and boom deployment exercises. The staff members identified below attended the following training programs, workshops, or oil spill response drills during 2012:

- a) Hilary Cosentino (Water Resources Technician III) successfully completed the U.S. Coast Guard Auxiliary Boating Skills and Seamanship Course on March 28, 2012. See attached copy of certificate.
- b) Monika Lange (Natural Resources Analyst) attended two days of the Exxon Mobil Worst Case Table Top Exercise on May 1 and 2, 2012. Leroy Deardorff (Environmental Program Director) and Jeremy Freimund (Water Resources Manager) participated in the exercise on May 2, 2012. See attached memorandum.
- c) Jeremy Freimund and Victor Johnson (Natural Resources Specialist) attended the Kinder Morgan Table Top Oil Spill Response Drill on October 17, 2012. See attached memorandum.
- d) The Lummi Oil Spill Response Team conducted an oil spill response drill with boom deployment at the Lummi Bay tide gates (NPS-8) on October 23, 2012. See attached memorandum for attendees.
- e) Merle Jefferson (Executive Director), Jeremy Freimund, Jamie Mattson (Water Resources Specialist II), and Hilary Cosentino attended the Oil Spill Open House in Port Townsend hosted by the U.S. Coast Guard on November 1, 2012. See attached agenda and participant list.
- f) The Lummi Oil Spill Response Team conducted an oil spill response drill with boom deployment at the Nooksack River Pump House (NPS-10) on November 13, 2012. See attached memorandum for attendees.
- g) Jeremy Freimund, Frank Lawrence III, and Victor Johnson participated in the BP-Cherry Point Worst Case Table Top Exercise on November 14-15, 2012. See attached memorandum.
- h) Ben Starkhouse (Harvest Manager) and Monika Lange (Natural Resources Analyst) attended the Natural Resources Damages Assessment (NRDA) training that was part of the BP Table Top Oil Spill Response Drill on November 14, 2012. See attached memorandum.

2. Equipment:

- a) The plexiglas window of the steering house and the seats on the spill response boat “MV Responder” were repaired during 2012. Routine maintenance was performed for the motor.

- b) The following supplies were restocked:
- 10 Heavy Duty Metal T-Style Fence Posts
 - 2 Pairs of Eye Protection
 - 1 Post Driver
 - 2 Boxes of Nitrile Gloves
 - 10 Work Gloves

3. Oil Spill Response Incidents:

- a) On February 22, 2012, an oil slick on-land was cleaned up by Jamie Mattson and Hilary Cosentino. See attached memorandum.
- b) On March 26, 2012, Monika Lange, Hilary Cosentino, and Victor Johnson investigated a report of spilled oil in the Sandy Point Heights Neighborhood. The incident was followed up with a letter to the apparent source. See attached memorandum.
- c) On June 13, 2012, Frank Lawrence III (Natural Resources Specialist) and Monika Lange cleaned up an on-land oil spill in a former boat repair shed at Gooseberry Point. See attached memorandum.
- d) On October 4, 2012, Hilary Cosentino and Victor Johnson investigated a report of an oil spill from a sunken skiff at Gooseberry Point. See attached memorandum.

4. Public Outreach:

The oil spill prevention and response activities were publicized in the community through articles in the Lummi Nation monthly newspaper (*Squol Quol*).

- a) Participation in Oil Spill Response Exercises was reported in the June 2012 and December 2012 *Squol Quol* editions.
- b) A poster with images of the October 23, 2012 Lummi Oil Spill Response Team Drill was published in the November 2012 *Squol Quol* edition and is displayed at a publicly accessible location in the LNR building.
- c) A report about the Lummi Oil Spill Response Team was published in the December 2012 *Squol Quol* edition.

Information about oil spill prevention and response capabilities (e.g., training logs, emergency contact information, equipment list, and the Unified Command Structure for the Lummi Natural Resources Department) are published on the Water Resources Division page of the Lummi Natural Resources Department website (<http://lnnr.lummi-nsn.gov/LummiWebsite/Website.php?PageID=67>) and regularly updated.

5. Data Collection/Research:

The Lummi Natural Resources Department staff regularly conducts data collection activities and research in support of the overall departmental mission to protect and restore tribal natural resources. These data collection/research activities support the goals of the oil spill prevention and response capability development by documenting background and ambient conditions. This information will be useful in evaluating the effectiveness of response efforts in the event of an oil spill and to protect public health and safety.

In addition, the Lummi Water Resources Division has conducted a number of activities that support efforts to prevent and respond to spills including developing and adopting water quality standards, storm water management regulations, and regulations that identify civil fines for activities that negatively impact Lummi Nation Waters.

Although some of these data collection/research and related activities are funded through the EPA (e.g., the ambient water quality monitoring program), other data collection and research activities are supported through other funding sources. Data collection/research activities conducted during 2012 that were focused on quantifying the tribal natural resources on tribal tidelands included the annual Manila Clam Stock Assessment Survey for 2012, which was conducted in Lummi Bay, Portage Spit, Brant Flats, and Brant Island.

Reference:

Lummi Water Resources Division (LWRD). 2005. Oil Spill Prevention and Response Plan. Prepared for the Lummi Indian Business Council. October.

ATTACHMENTS

Certificate of Accomplishment

For successfully completing the

U. S. Coast Guard Auxiliary
Boating Skills and Seamanship

Awarded to

Hilary Cosentino

Lenny Nidaguchi

Ftollia Commander
130-01-01

District, Division, Ftollia

28 March 2012

Date



Contents Approved by the
National Association of
State Boating Law Administrators
and recognized by the
United States Coast Guard

INTEROFFICE MEMORANDUM

TO: JEREMY FREIMUND, WATER RESOURCES MANAGER
FROM: MONIKA LANGE, NATURAL RESOURCE ANALYST
SUBJECT: LUMMI NATURAL RESOURCES DEPARTMENT STAFF PARTICIPATION IN EXXON
MOBIL WORST CASE TABLE TOP EXERCISE MAY 1 -2, 2012
DATE: 5/3/12
CC:

The purpose of this memorandum is to document the participation of Lummi Natural Resources Department staff in the Exxon Mobil Worst Case Table Top Exercise on May 1 and 2, 2012.

The spill response exercise was a joint spill response drill between Exxon Mobil (represented through the Exxon Mobil SeaRiver Branch and the Exxon Mobil North American Regional Response Team) and the U.S. Coast Guard with representatives from the WA Department of Fish and Wildlife and professional spill response companies present. The exercise simulated a 2.9 million gallon oil spill in Rosario Strait from a tanker collision with a barge.

I joined the exercise on May 1, 2012 to participate in the training offered before the event scenario was enacted and primarily shadowed the logistics section during the exercise on May 2, 2012. Jeremy Freimund and Leroy Deardorff, Environmental Director, joined the exercise on May 2, 2012 and participated in the Unified Command in the roles of Tribal On-Scene Coordinator (TOSC) (Leroy) and Assistant to the TOSC (Jeremy). Jeremy and Leroy participated for 8 hours total and I received training for 16 hours total.

Attachment: Exercise Agenda

Wednesday, May 2

ALL EXERCISE PARTICIPANTS

0600 – 0800 Breakfast for all in Hook and Plow restaurant on Lobby level of hotel

0700 – **EXERCISE KICK-OFF** (excluding SeaRiver “GO TEAM” and NARRT) – Command Center (Ballrooms D, E, F & G) – Conference Center (one level below Hotel Lobby)

0730 - **SeaRiver “GO Team”** joins exercise in Ballroom A

0800 - 1145 **NARRT** – Joint training session in Ballroom B, C

1145 – 1300 - **Lunch** will be available on rotating basis in the Hook and Plow restaurant.
Section Leaders to determine schedules based on workload.

1300 - **NARRT “arrives” in Seattle**, enters Command Center and starts transition activities

Note: Transition efforts directed by Unified Command with regard to process and timing.

1730 - 1900 - Working dinner in Hook and Plow restaurant on the Lobby level of the hotel

1800 – 2200 - Unified Command/Section Leaders decide activities during this time period

Thursday, May 3

0600 – 0700 Breakfast for all in Hook and Plow Restaurant on Lobby level of hotel

0700 – Exercise continues until approval of an IAP by Unified Command, for the next 24 hour operating period (Thursday 0600 – Friday 0600) and the exercise hot wash is complete

1130 – 1300 **Buffet lunch** available on flow basis in Hook and Plow restaurant. Section Leaders to determine schedules based on workload.

1800 (approx.) - Exercise concludes when Incident Action Plan is complete and Lessons Learned conducted

Dinner on your own

Friday, April 4 - Travel day — everyone on their own — no planned events

Hello Washington State NARRT Exercise Participants

On behalf of SeaRiver Maritime Inc., welcome to the 2012 Washington State NARRT Exercise. We thank you for your time and commitment and believe this exercise will provide a learning opportunity by being able to work with our Federal, State and local partners to better understand the issues unique to this area.

To ensure a common understanding of the schedule of events please be guided accordingly.

Monday, April 30

NARRT MEMBERS

Travel day for NARRT – NARRT must check into hotel no later than Monday night.

1700 - 1900 - We encourage you to check in and get your security badge for the exercise. You can get your badge by going to the Ballroom D one floor below the Lobby in the Seattle Waterfront Marriott. You will need your Exercise ID Badge for the exercise on Tuesday morning.

There will be a reception during the badging period. Dinner is on your own.

OTHER EXERCISE PARTICIPANTS

NO ACTION REQUIRED

Tuesday, May 1

NARRT MEMBERS

0630 – 0730 **Breakfast for all training participants will be available in Hook and Plow Restaurant located on lobby level of the Marriott.**

0730 - 1700 – NARRT Training in Ballrooms A, B, C

1700 - There will be a **dinner cruise** on Argosy Cruises departing from Pier 56 at 6 PM for all NARRT members and other invited guests. Please arrive no later than 5:45 PM. As you exit the hotel, turn left on Alaskan Way and proceed southeast on Alaskan Way for ½ mile - Argosy Cruises will be on the right. **You will need your Exercise ID Badge to board the vessel for the dinner cruise. THERE WILL ALSO BE BUSES DEPARTING THE MARRIOTT STARTING AT 5 PM TO TAKE YOU TO ARGOSY CRUISE.**

OTHER EXERCISE PARTICIPANTS

1600 - 1715 - We encourage you to check in and get your security badge for the exercise. You can get your badge by going to the Ballroom D one floor below the Lobby in the Seattle Waterfront Marriott. You will need your ID Badge for the exercise on Wednesday morning.

1745 - All are welcome to attend the **dinner cruise (Argosy Cruises at Pier 56) at 6 PM based on your individual agency guidance.** Please arrive no later than 5:45 PM. As you exit the hotel, turn left on Alaskan Way and proceed southeast on Alaskan Way for ½ mile - Argosy Cruises will be on the right. **You will need your Exercise ID Badge to board the vessel for the dinner cruise.**

INTEROFFICE MEMORANDUM

TO: JEREMY FREIMUND, WATER RESOURCES MANAGER
FROM: MONIKA LANGE, NATURAL RESOURCE ANALYST
SUBJECT: LUMMI NATURAL RESOURCES DEPARTMENT STAFF PARTICIPATION IN KINDER MORGAN WORST CASE TABLE TOP EXERCISE OCTOBER 17, 2012
DATE: 10/19/12
CC:

The purpose of this memorandum is to document the participation of Lummi Natural Resources Department staff in the Kinder Morgan Worst Case Table Top Exercise on October 17, 2012.

The spill response exercise was a spill response drill by the pipeline company Kinder Morgan with representatives from the Environmental Protection Agency, the US Coast Guard, the Whatcom Emergency Unified Emergency Management, the WA Department of Fish and Wildlife, and professional spill response companies present. The exercise simulated a 15,000 barrel oil spill from a holding tank at Hannigan Road in Bellingham with oil progressing along Deer Creek towards 10 Mile Creek and the Nooksack River.

Jeremy Freimund (Water Resources Manager), Victor Johnson (Natural Resources Specialist), and Monika Lange (Natural Resources Analyst) joined the exercise. Jeremy participated in the Unified Command in the role of Tribal On-Scene Coordinator for the entire day, Victor participated as his assistant throughout the morning, and I stayed for one hour in the morning as an observer.

Attachment: Exercise Invitation

September 10, 2012

Good Morning,

Kinder Morgan Canada will be conducting a Worst-Case Discharge Tabletop Exercise on Wednesday, October 17, 2012 at the Hampton Inn, Bellingham, WA. This is the third and final exercise of a three part drill series that began in 2010. The exercise will involve Kinder Morgan personnel as well as contractors, consultants and regulatory agencies as our Incident Management Team using the ICS to respond to this mock spill.

We are extending this invitation to your organization to participate in our exercise. Your observations and feedback at the end of the exercise will be well received and much appreciated.

Location: Hampton Inn
3985 Benneft Drive
Bellingham, WA 98225
Phone: (360) 676-7700

Schedule: Wednesday, October 17, 2012

7:00am Continental Breakfast
8:00am Exercise briefing
12:00pm Lunch (provided)
5:00pm Exercise concludes

Kinder Morgan Contacts:

Kelly Malinoski	(403) 514-6538
Patrick A. Davis	(360) 398-1541
Wayne Arcand	(604) 291-2744

If you require lodging for the evening prior to the exercise, please be aware that Kinder Morgan has booked a block of rooms at the Hampton Inn, Bellingham, which if not booked will be released by September 14, 2012. While we request that you book your own lodging you are welcome to reference the Kinder Morgan block.

Please RSVP to kelly_malinoski@kindermorgan.com and indicate the names of the individuals from your organization that will be attending. We look forward to seeing you on October 17th. If you have any questions, please feel free to contact either Kelly, Patrick or Wayne at the numbers provided above.

Sincerely,

Kelly Malinoski
Emergency Response and Security Advisor
Kinder Morgan
(403) 514-6538

INTEROFFICE MEMORANDUM

TO: MERLE JEFFERSON SR., EXECUTIVE DIRECTOR
JEREMY FREIMUND, WATER RESOURCES MANAGER
FROM: MONIKA LANGE, NATURAL RESOURCE ANALYST
SUBJECT: OCTOBER 23, 2012 LUMMI BAY TIDE GATES OIL SPILL RESPONSE DRILL (NPS-8)
DATE: 10/30/12
CC: SGT ED CONWAY

The purpose of this memorandum is to summarize the spill drill that took place on October 23, 2012.

Participants:

The following LNR and LNPd staff participated in the drill:

1. Jeremy Freimund, LNR Water Resources Manager
2. Frank Lawrence III, LNR Natural Resources Specialist
3. Jamie Mattson, LNR Water Resources Specialist II
4. Victor Johnson, LNR Natural Resources Specialist
5. Hilary Cosentino, LNR Water Resources Technician III
6. Monika Lange, LNR Natural Resources Analyst
7. Sergeant Ed Conway, LNPd
8. Officer David Savage, LNPd
9. Officer Jay Martin, LNPd
10. Don Kruse, LNR Project Biologist
11. Frank Bob, LNR Restoration Assistant
12. Gregg Dunphy, LNR Forest Fish Manager
13. Chris Phair, LNR Restoration Technician II

Peter Marcus from the Marine Spill Response Corporation (MSRC) participated throughout the drill and provided suggestions and hands-on support during the deployment.

Drill Strategy:

The exercise was a half-day oil spill response drill with boom deployment. The goal of the drill was to deploy boom strategy NPS-8 of the Geographic Response Plan (GRP) for the North Puget Sound (NPS) region (see attached diagram). NPS-8 calls for deflection boom to be placed in a chevron configuration in front of the tide gates located in the seawall adjacent to Sandy Point Heights along Lummi Bay. The boom is supposed to prevent oil from entering northern distributary channel of the Lummi River.

Drill Goals:

1. Test NPS-8.
2. Test accessibility of the site by boat.
3. Practice the use of fence posts as shore anchors.
4. Practice team work.

There are pilings extending into the water way in front of the tide gates closing off the site from boat access at low tides. One of the goals for the drill was to ascertain if the Harbercraft boat operated by the Lummi Water Resources Division can access the site for boom deployment. The sediment in front of the tide gates appears to be too soft to deploy a boom on foot at low tide. The site is accessible by road for the boom trailer and the boom was to be deployed from the shore directly at the site.

Briefing and Scenario:

During the pre-meeting held in the Sam Cagey room at the LNR office, Jeremy outlined the scenario for the day and addressed each of the agenda items. In the scenario, oil from an oil barge accident north of Lummi Island (NPS-C) was predicted to enter Lummi Bay and the Unified Command for the incident directed the Lummi Spill Response Team to deploy NPS-8.

Briefing Agenda:

1. Check in/Introductions
2. Briefing/Scenario
3. ICS Review
4. Safety (Rocks, Water [PFDs], Bees, Hypothermia)
5. Deployment (Boom)
6. Debriefing/Lunch
7. Check out

Tide Predictions (Cherry Point Station) for October 23, 2012:

Low Tide: 6:13 am, 0.9 ft

High Tide: 13:50 pm, 9.1 ft

Low Tide: 8:25 pm, 4.1 ft

Timeline of the October 23, 2012 Oil Spill Response Drill

<i>Time</i>	<i>Event</i>
10:05 am	Pre-meeting with explanations of scenario and goals, ICS refresher, safety briefing, and job assignments.
10:26 am	Mobilization
10:50 am	The LNR Harbercraft leaves the Central Campus.
10:56 am	The boom trailer leaves Central Campus.
11:00 am	The Harbercraft arrives at the launch site.
11:04 am	Launch of Harbercraft.
11:06 am	The boom trailer arrives at the site of NPS-8.
11:21 am	Start of boom unloading.
11:25 am	The Harbercraft arrives at the site.
11:40 am	The boom deployment is complete.
11:45 am	Recovery of the boom starts.
12:07 pm	The recovery is complete.
12:20 pm	The boom trailer arrives back at the Central Campus.
12:30 pm	The Harbercraft arrives at the Central Campus.
12:35 pm	Lunch, de-briefing, and check out.
1:10 pm	End of debriefing. Cleaning of the Harbercraft and re-storing of supplies.
2:00 pm	End of drill.

Results:

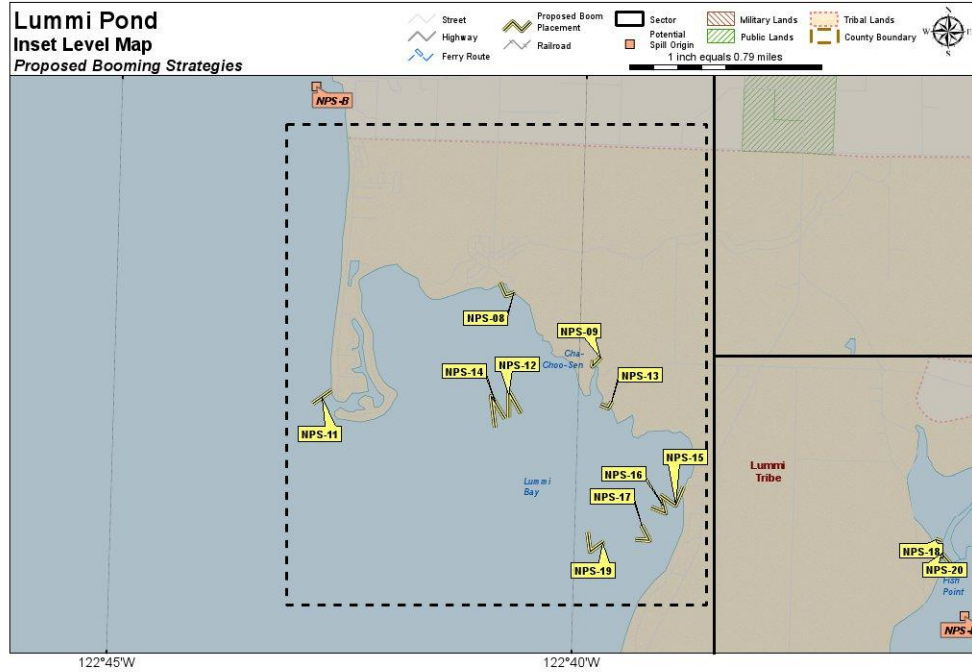
The following are “lessons learned” and recommendations resulting from the drill:

- The GRP recommends 400 ft of boom for NPS-8. The drill demonstrated that 300 ft was a better fit for the site.
- The site was accessible by the shallow-draft boat at the tide conditions of October 23, 2012. The Harbercraft was launched at the mouth of the Lummi River channel (adjacent to NPS-9)

east of the NPS-8 site and maneuvered around the pilings in front of the tide gates. The boat crew reported that access would also have been possible at slightly lower tide levels.


- In the debriefing it was noted that a smaller boat would have been adequate to deploy the boom which would allow access at lower tides. A smaller boat can even be hand-carried down to the deployment site and launched without need to circumnavigate the pilings.
- Peter Marcus (MSRC) showed Lummi team members how to set up metal fence posts as shore anchors in a triangle configuration to distribute the load. He recommended purchasing stronger posts and eye protection. The eye protection is needed when hammering the posts into the ground.
- Peter also recommended the use of wader leashes. Wader leashes are attached to belt of a responder wearing chest or hip waders and held by a team member on the shore. In case of a fall where the waders can become swamped with water, the shore team member can rope the responder back to safety.
- During the drill, the post fence driver could not be located. Additional supplies recommended in the debriefing were a machete to access overgrown shore anchor points and possibly a chainsaw.
- One of the two VHF radios used by the Water Resources Division did not function properly and will be repaired or replaced.
- Site NPS-8 is one of the few deployment sites that is located directly adjacent to residential properties. As a matter of courtesy, residents should be notified in the future before the drill to avoid alarm.
- Peter Marcus suggested for the Lummi Spill Response Team to contact MSRC for a tour of the MSRC equipment in Bellingham with an emphasis on anchoring options.

See below: NPS-8 Averages, Drill Images, Sign-up Sheet



North Puget Sound (NPS) GRP, Version 1.00

General Overview Map Priorities **Sector Map** Matrices Access Strategy Staging

Sandy Point Tide Gates		NPS-08-Average	4-88
Site Lat/Long:	N 48° 48.113' / W 122° 40.832', Sector Map NPS-4		
Strategy Objective:	Exclusion - Keep oil out of slough		
Implementation:	There are two options: block-off tide gates, if that is not possible deploy boom in a chevron in front of the tide gates. To deploy the chevron will require a skiff and 3 people. Piling in the area could be used to help hold the boom in place.		
Site Safety Note:	Slips, trips, falls. Piling.		
Field Notes:	Paved road access.		
Resources Targeted:	tribal lands/resources, sensitive habitat		
Fixed Anchors:	193: N 48° 48.191' / W 122° 40.783', Water Depth 0ft, shore near tide gates, adjust as needed		
Watercourse Description:	Slough		
			
Suggested Equipment			
Quantity	Description		
400 ft	B2 - Contractor Boom		
1 each	Danforth(s) or other appropriate anchor		
4 each	Stake(s)		
Suggested Personnel			
1	Boat Operator (s)		
2	Laborer (s)		
Status: Visited and Not Tested 07/30/2008			

North Puget Sound (NPS) GRP, Version 1.00

General Overview Map Priorities **Sector Map** Matrices Access **Strategy** Staging



Boom unloading



Readying boom on shore, pilings in background



Towing boom off shore



Setting up shore anchor above tide line



Knot for fence post anchor



Shore anchor on east side of tide gates



Deployed boom with central anchor



Retrieving central anchor



Reloading the boom



Debriefing after lunch

Oil Spill Drill October 23, 2012
Check-in/out and Cell Phone Numbers

#	Name	Department/Division	Cell Phone Number	Check-in Time	Check-out Time
1.	Jeremy Freimund	LNR/Water	410-1775	1002	11:10 pm
2.	Jamie Mattson	LNR/Water	815-7863	10:00am	
3.	Frank Lawrence III	LNR/Water	410-1990	10 AM	
4.	Victor Johnson	LNR/Water	393-2269	10 am	
5.	Hilary Cosentino	LNR/Water			
6.	Monika Lange	LNR/Water	296 5226	10 AM	
7.	Frank Bob	LNR/Restoration	410-1783	10 AM	
8.	Sgt. Ed Conway	LNPD	410-6813	10 AM	
9.	Officer Jay Martin	LNPD	410-8201	10	
10.	Officer David Savage	LNPD	553-880-2208	10 AM	
11.	Gregg Dunphy	TWE	410-1743	10 AM	
12.	Chad Huntley	MSRC	206-459-4323		
13.	PETER MARCUS				
13.	Ben Starkhouse	LNR/Harvest Management			
14.	Nick Kunkel	LNR/Harvest Management	(360) 389-7603	10:00 AM	
15.	Don Kruse	LNR Biologist Stock Ass.	360-961-0675	10:00 AM	
16.	Dave S				
17.	Jay Martin				
18.	Hilary Cosentino	LNR- water resources	541-490-4563	10:00 am	
19.	Chris Phair	LNR Restoration		10:30 am	
20.					
21.					

Ken Camasco

Pacific Northwest Oil Spill Open House

For Local Stakeholders - Agenda

Thursday, November 1, 2012

Northwest Maritime Center - Port Townsend, WA

DAY SESSION: 10:00am – 3:00pm

- 0930 REGISTRATION**
- 1000 Workshop Welcome – Capt. Stump, US Coast Guard Deputy Sector Commander**
- 1010 Workshop Overview – Ann-Hayward Walker, SEA Consulting Group**
- 1020 Interactive Survey – A. H. Walker**
- 1100 Offshore Spill Scenario – Context for Discussion (Dr. Alan Mearns, NOAA)**
- 1115 OIL SPILL PANEL DISCUSSION**
- Decision Making under the National Response System (Chris Field, EPA Regional Response Team Co-Chair)
 - Overview of Spilled Oil Weathering/Fate/Behavior (Tom Coolbaugh, JITF)
 - Offshore Response Options (Scott Knutson, USCG RRT Co-chair and D13 DRAT)
 - Overview of Dispersants/Burning and Tradeoffs (H. Parker, USCG)
 - Decision-Making Challenges with Given Scenario (Capt. Stump, USCG)
- 1230 Working Lunch Served (buffet)**
- 1230 One-on-One Discussions with Oil Spill Practitioners (see next page)**
- 1445 Report Out, Workshop Evaluation Form (Capt. Stump, A.H. Walker)**
- 1500 Adjourn**

EVENING SESSION: 6:00pm – 9:00pm

[Light Buffet (cold) served at 7:00pm]

Introduction by Capt. Ferguson, USCG Federal On-scene Coordinator, and A.H. Walker
Offshore spill scenario, interactive survey, and one-on-one discussions with oil spill practitioners

After 5 days
30-35% and
60-65% Flaming
1-5% recover ~ 20% max
- Mechanical
- 5 gal/acre
- 1 part dispersant
to 20 parts
oil

Regional Response
Team

Open House Information Stations

Station	TOPIC	Oil Spill Practitioners
1	Decision Making in the National Response System	Chris Field, EPA and Capt. Stump, USCG
2	Spill Potential: Oil Types and Properties	Scott Knutson*, USCG; LTJG Alice Drury, NOAA
3	Mechanical Recovery and Protection	Graig Cornell, MSRG; Tom Gallahan*, WSMC
4	Controlled Burning	Al Allen*, Spiltec
5	Dispersants	Dr. Tom Coolbaugh*, Exxon Mobil and Joint Industry Oil Spill Preparedness and Response Task Force; Heather Parker*, USCG
6	Safety and Health: Public and Responders	Dr. Karen Larson ATSDR/HHS; Dr. Susan Shelnutt*, CTEH
7	Fate and Toxicity	Dr. Gina Goelho*, EMA; Dr. Adriana Bejarano*, RPI; Dr. Alan Mearns*, NOAA
8	Seafood Safety	Dr. Walt Dickhoff*, NOAA/NMFS; Dr. Steve Lewis*, Integral Policy & Science, LLC
9	Wildlife and Environmental Impacts	Ruth Yender*, NOAA; Dr. Dan Doty, WA DFW; Charles Hebert*, US FWS
10	Shoreline Assessment, Cleanup, and Impacts	Dr. Ed Owens*, Owens Coastal Consultants Ltd.; John Tarpley*, NOAA
11	Environmental Mapping for Spill Planning and Response	Jill Bodnar, NOAA*

*** Experience with 2010 Gulf of Mexico Oil Spill**

Oil Spill Open House Participants

Nov. 1, 2012, Port Townsend, WA

Morning Session					Title	E-mail	Phone Number
John	Last Name	Organization	Commissioner			jauslin@co.jefferson.wa.us	
Margaret	Austin	Jefferson County	Executive Director			margaretbarrette@psa.org	360-754-2744
Viviane	Barrette	Pacific Coast Shellfish Growers Association	Shellfish Program Manager			vbarry13@suquamish.nsn.us	360-394-8448
Jake	Barry	The Suquamish Tribe Fisheries Department	Executive Director			jake@nwmaritime.org	
Susan	Beattie	Northwest Maritime Center	Co-Chair			slb@whildbey.com	
Chad	Bennett	Wildbey Audobon Conservation Committee	Office of Marine Affairs, RRT ID			bowechop.chad@centurytel.net	360-240-5572
Eric	Bowchop	Makah Tribe	Deputy Director			e.brooks@co.island.wa.us	360-337-5672
Janet	Brooks	Island County DEM	SHW Program Manager			jan.brower@kitsapublichealth.org	
Tim	Brower	Kitsap Public Health District	Coordinator			timothy.f.callister@uscg.mil	
Michael	Callister	USCG	Crisis Management Lead			StraitSoundEnvironmental@wavecable.com	360-797-3161
Hilary	Condon	Strait Ecosystem Recovery Network	Water Resources Technician			michael.condon@bp.com	425-501-6085
Rebecca	Cosentino	BP	Program Director			hilaryc@lummi-nsn.gov	360-543-5686
Larry	Craven	Lummi Natural Resources	Executive Director			rebecca@pstrust.org	360-385-0656
Dean	Crockett	Pipeline Safety Trust				larry@portofpt.com	
Peter	Dale	Port of Port Townsend	President			deand@genwest.com	360-385-3691
Joan	Downey	Genwest Systems	Programs Director			peter@discoverybayshellfish.com	360-733-1725
Fred	Drinkwin	Discovery Bay Shellfish Inc.	Owner			fellemann@comcast.net	206-595-3825
Jeremy	Felleman	Northwest Straits Foundation	Water Resources Manager			jeremy.f@lummi-nsn.gov	503-861-6216
William	Frelmund	WAVE Consulting	Commander			William.R.Gibbons@uscg.mil	360-307-5873
Michael	Gibbons	Lummi Natural Resources	Operations Manager			mgordon@co.kitsap.wa.us	(360)317-6284
Phil	Gordon	U.S. Coast Guard Sector Columbia River	Yellow Island Preserve Steward			pgreen@tnc.org	778-679-0213
Ken	Green	Kitsap County Department of Emergency Management	Vice-Chair			khancock@islandstrust.bc.ca	360-2801-588
Todd	Hancock	The Nature Conservancy	Program Manager: Marine and Nearshore Special Projects			todd.hass@psp.wa.gov	(360) 390-8296
Ron	Hass	Islands Trust	Commissioner District 2			ron@redfernconsultants.com	360-678-4803
Angie	Hayes	Puget Sound Anglers - East Jefferson Chapter	G.M.			A.Homola@co.island.wa.us	360-477-7265
Ian	Homola	Island County Board of Commissioners	Director			ian@penncoveshellfish.com	360-379-2855
Merle	Jeffers	Penn Cove Shellfish, LLC	Secretary			merle@lummi-nsn.gov	360-394-8514
Bill	Jensen	Lummi Natural Resources	Shellfish Biologist / Coordinator			johns.jerry@gmail.com	360-452-6388
Jerry	Johnson	Olympic Peninsula Audubon	Habitat Biologist			clear@co.clallam.wa.us	360-370-7592
Luke	Kelly	East Jefferson Chapter of Puget Sound Anglers	MRC			LCLD EHR@stoel.com	360-385-5985
Cathy	Lear	The Suquamish Tribe Fisheries Department	Marine Programs Manager			linda@sanjuanco.com	425-771-2700 x232
Lincoln	Loehr	Clallam County	Water Resources Specialist			jamlem@lummi-nsn.gov	360-202-208
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Jamie	Mattson	San Juan County Marine Programs	President			johnm@genwest.com	360-385-5098
Bob	Miller	Lummi Natural Resources	Environmental Engineer			Neil.L.Norcross@tsccorp.com	360-316-9870
John	Murphy	Puget Sound Anglers	Toxicologist			lenford.ogarro@doh.wa.gov	360-378-7172
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Andy	Okinczyk	Washington State Department of Health				loveip@sanjuanco.com	
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Lovel	Pratt	Jefferson County Environmental Health	Member			GReiter44@gmail.com	360-379-4875
Dan	Reandean	San Juan County	Lieutenant			johna.n.rossetti@uscg.mil	503-861-6142
Gary	Reiter	Westcliffe Environmental Management	Marine Mammal Stranding Specialist			Kelly.A.Thorkilson@uscg.mil	503-861-6141
Brian	Roe	PSA East Jefferson Chapter				Kristin.Wilkinson@noaa.gov	206-526-4747
Johna	Rossetti	U.S. Coast Guard Sector Columbia River					
Kelly	Thorkilson	U.S. Coast Guard Sector Columbia River Incident Management Division					
Krislin	Wilkinson	NDAA Fisheries					

Oil Spill Open House Participants

Nov. 1, 2012, Port Townsend, WA

Evening Session					
First Name	Last Name	Organization	Title	E-mail	Phone Number
Mary	Pitts	Jefferson County	MRC	arts@kindlwood.com	
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Heleen	Price Johnson	Island County	Commissioner	disfrict1@co.island.wa.us	360-679-7385
Subject Matter Experts					
First Name	Last Name	Organization	Title	E-mail	Phone Number
Alan	Allen	Spiltec	Oil Spill Specialist	alan@spiltec.com	425-869-0988
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Adriana	Beltrano	RPI	Aquatic Toxicologist	abelarano@researchplanning.com	803-254-0278 x 328
Jill	Bodnar	NDAA Office of Response & Restoration	Geographic Information Specialist	jill.bodnar@noaa.gov	206-818-8974
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Josie	Clark	EPA	NW Area Planner	clark.josie@epa.gov	206-553-6239
Tom	Coolbaugh	ExxonMobil Research & Engineering	Distinguished Scientific Associate	thomas.s.coolbaugh@exxonmobil.com	215-518-4417
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Scott	Ferguson	USCG Sector Puget Sound CD	Captain, FDSC	scott.j.ferguson@uscg.mil	206-499-9105
Chris	Field	USEPA	EPA Co-Chair to RRT-1D	field.chris@epa.gov	206-553-174
Pete	Granger	Washington Sea Grant	Program Leader	pgranger@uw.edu	206-685-9261
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Scott	Knutson	USCG D13	District Response Advisory Team Supervisor	Scott.knutson@uscg.mil	
Karen	Larson	Agency for Toxic Substances and Disease Registry	Environmental Health Scienlist/Regional Representative	kul5@cdc.gov	206-553-6978
Steven	Lewis	Integral Policy & Science, LLC	President	stevencraiglewis@comcast.net	908-892-3782
Brian	MacDonald	Washington Dept. of Fish and Wildlife	Oil Spill Planning and Response Specialist	brian.macdonald@dfw.wa.gov	360-902-8122
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Alan	Mearns	NDAA ERD	Biologist	Alan.Mearns@noaa.gov	
Ed	Owens	DCC	President	edowens@noaa.gov	(206) 369-3679
Heather	Parker	USCG D13	RRT 1D Coordinator	heather.a.parker@uscg.mil	206-220-7215
Susan	Shelnett	CTEH	Senior Toxicologist	sshelnett@cteh.com	501-773-0940
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Ann Hayward	Walker	SEA Consulting	President	ahwalker@seaconconsulting.com	757-331-1787
Ruth	Vander	NDAA Office of Response and Restoration, Emergency Response Division	Scientific Support Coordinator for the NW and Pacific Islands	ruth.vander@noaa.gov	206-526-6081

INTEROFFICE MEMORANDUM

TO: MERLE JEFFERSON SR., EXECUTIVE DIRECTOR
JEREMY FREIMUND, WATER RESOURCES MANAGER

FROM: MONIKA LANGE, NATURAL RESOURCE ANALYST

SUBJECT: NOVEMBER 13, 2012 NOOKSACK RIVER PUMP HOUSE OIL SPILL RESPONSE DRILL
(NPS-10)

DATE: 11/19/12

CC: SGT ED CONWAY

The purpose of this memorandum is to summarize the spill drill that took place on November 13, 2012.

Participants:

The following LNR and LNPd staff participated in the drill:

1. Jeremy Freimund, LNR Water Resources Manager
2. Frank Lawrence III, LNR Natural Resources Specialist
3. Jamie Mattson, LNR Water Resources Specialist II
4. Victor Johnson, LNR Natural Resources Specialist
5. Hilary Cosentino, LNR Water Resources Technician III
6. Monika Lange, LNR Natural Resources Analyst
7. Sergeant Ed Conway, LNPd
8. Officer David Savage, LNPd
9. Officer Jay Martin, LNPd
10. Don Kruse, LNR Project Biologist
11. Frank Bob, LNR Restoration Assistant
12. Gregg Dunphy, LNR Forest Fish Manager
13. Chris Phair, LNR Restoration Technician II

Ken Schacht from the Marine Spill Response Corporation (MSRC) participated in the drill and provided suggestions during the deployment.

Drill Strategy:

The exercise was a half-day oil spill response drill with boom deployment. The goal of the drill was to deploy boom strategy NPS-10 of the Geographic Response Plan (GRP) for the North Puget Sound (NPS) region (see attached diagram). NPS-10 calls for deflection boom to be placed in front of the hatchery pump house along the right bank (looking downstream) just downstream from the Marine Drive Bridge over the Nooksack River. Its purpose is to deflect oil moving down the river from a pipeline accident or other incident that releases oil into the river above the bridge.

Drill Goals:

1. Test NPS-10 which is only identified in the GRP but is not well described (e.g., boom or equipment requirements are not identified) and has not been tested before.
2. Determine the length and configuration of boom needed.
3. Determine shore anchor points.
4. Determine boom location relative to the log jam and sand bar that has formed at the bridge pilings closest to the pump house.
5. Practice team work.

Briefing and Scenario:

During the pre-meeting held in the Sam Cagey room at the LNR office, Jeremy outlined the scenario for the day and addressed each of the agenda items. In the scenario, oil from a storage tank that failed at the Kinder-Morgan facility at East Smith Road and Hannegan Road could not be contained as it moved down Deer Creek and 10-Mile Creek and is threatening to enter the Nooksack River. The Unified Command for the incident directed the Lummi Spill Response Team to deploy NPS-10 to protect the water intake for the Lummi Bay Hatchery. The team discussed possible boom placement options.

Briefing Agenda:

1. Check in/Introductions
2. Briefing/Scenario
3. ICS Review
4. Safety (Rocks, Water [PFDs], Bees, Hypothermia, Trash/Needles at Launch Site)
5. Deployment (Boom)
6. Debriefing/Lunch
7. Check out

Timeline of the November 13, 2012 Oil Spill Response Drill

<i>Time</i>	<i>Event</i>
10:05 am	Pre-meeting with explanations of scenario and goals, ICS refresher, safety briefing, and job assignments.
10:25 am	Mobilization
10:45 am	The LNR Harbercraft leaves the Central Campus.
10:51 am	The boom trailer leaves Central Campus.
10:50 am	The Harbercraft arrives at the launch site on the river bank opposite the pump house. The launch site was very sandy/muddy and the Nissan Titan pulling the boat sunk into the road way. The boat could not be launched from this launch site.
10:56 am	The LNRD jet boat arrives at the site (launched at Fish Point).
10:57 am	The boom trailer arrives at the pump house site.
Approx. 11:15 am	100 ft of boom are unloaded, pulled by the jet boat, and fastened to an alder tree beyond the pump house inside of the log jam/sand bar. The boom is angled out with an anchor attached to the boom midpoint. The team observes the behavior of the boom and discusses alternate deployment configurations.
12:00 am	The recovery of the boom is complete.
12:10 pm	The boom trailer and Harbercraft arrive back at the Central Campus.
12:15 pm	Lunch, de-briefing, and check out.
Approx. 1:30 pm	Finishing uncoupling of the Harbercraft and re-storing of supplies. End of drill.

Results:

The following are “lessons learned” and recommendations resulting from the drill:

- The log jam and sand bar around the bridge piling extending in front of the pump house creates a shallow side channel at this location. There is enough space to deploy boom in this channel and it is not necessary to configure the boom on the outside of the log jam. Deploying boom upstream of the log jam at the bridge piling would probably create a dangerous situation due to the strong current pressing the deploying boat against the log jam and entangling boom.
- The GRP has currently no recommendation for the length of the boom. The 100 ft deployed at the drill was too short. Oil would have eddied into the area of the oil intake. The

small Danforth anchor used did not stretch out the boom straight into the current. The curve in the boom lead to turbulence and would have entrained oil under the boom. Gregg Dunphy suggested using traditional staking poles to support the angle of the boom.


- The team concluded that a double-layered boom deployment would be needed to protect this sensitive resource. The team recommendation is to use 100ft of inner boom with a layer of sorbent boom on the inside and 200 ft of outer boom both at a flat angle into the current to achieve maximum deflection.
- The bank of the river is very steep and overgrown at the shore anchor site. Attaching the shore point of the boom with a simple tie-off to a tree led to a gap between the end of the boom and shore bank where oil would be able enter. Ken Schacht from MSRC recommended to tie off the boom with a tension line at the first anchor point 50 ft into the boom and to use the shore-side 50 ft of the boom to drape over the bank to achieve a good seal against oil. This system has been recommended to the team previously and a goal of the next drill will be to practice this tie-off method.
- The sediment of the boat launch site on the opposite bank was too soft to support the Water Resources Division truck and the boat could not be launched from this site. The Fish Point boat launch served as an alternative. The LNPD jet boat was able to traverse the relatively shallow channel.
- It was noted by the shore team that the boom trailer tarp collects a lot of water. It was mostly released by driving briefly uphill.
- Generally the attendance of staff from the Lummi Bay Hatchery would be desirable for their expertise about the pump.

Supply Needs

This drill and the drill on October 23, 2012 revealed the following supply needs which will be filled as soon as possible:

- Sturdier metal fence posts
- Eye protection
- Replacement for the missing post driver
- Wader leashes
- Work Gloves
- When funds become available: Custom-fabricated River Anchors for Soft Sediment


See below: NPS-8 Averages, Drill Images, Sign-up Sheet

Water Intake Nooksack River		NPS-10-Average	4-93
<div style="display: flex; justify-content: space-between; font-size: 0.8em;"> NPS View of water intake from bridge </div>  <div style="font-size: 0.7em; margin-top: 5px;"> N 48° 47' 28.19" W 122° 30' 26.58" W 04 07/30/2008 2:17:07 PM Image-1174: Overview of water intake. No Image Available </div>		Site Contact Information High Priority - contact immediate or before entering: Contact Lummi Nation, (W) 360 384-2266, (M) 360-410-1706, (H) 360 384-2225, First number is for police, second and third is for natural resources dept. Lummi Nation Sea Ponds, Seaponds Hatchery Manager Bob Hall (360-384-2221) Natural Resources Department Executive Director Merle Jefferson (360-410-1706)	
		Closest Address: 98226 Driving Directions: Cannot Drive to Site	

North Puget Sound (NPS) GRP, Version 1.00

4-93

General
Overview Map
Priorities
Sector Map
Matrices
Access
Strategy
Staging

Water Intake Nooksack River		NPS-10-Average	4-92				
Site Lat/Long:	N 48° 47.452' / W 122° 35.409', Sector Map NPS-6						
Strategy Objective:	Notification - Keep oil from entering water intake.						
Implementation:	Provide notice, Lummi Nation to put eyes on the water, if oil observed pump to be shut down.						
Field Notes:	Pump only runs certain times of year, Aug. - Dec, and Feb. - May. Water in-take depth about 10 feet. The fish being fed with this water can only live a few hours with the pump off.						
Resources Targeted:	water intakes						
Watercourse Description:	River with tidal influence						
		Suggested Equipment <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Quantity</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td colspan="2">Suggested Personnel</td> </tr> </tbody> </table> Status: Visited and Not Tested 07/30/2008		Quantity	Description	Suggested Personnel	
Quantity	Description						
Suggested Personnel							

North Puget Sound (NPS) GRP, Version 1.00

4-92

General
Overview Map
Priorities
Sector Map
Matrices
Access
Strategy
Staging



Mobilization



LNPD Jet Boat



Towing boom off shore



Setting out anchor



Deployed Boom



Discussion of deployment configurations



Reloading of boom

Oil Spill Drill November 13, 2012
Check-in/out and Cell Phone Numbers

#	Name	Department/Division	Cell Phone Number	Check-in Time	Check-out Time
1.	Jeremy Freimund	LNR/Water	410-1775	10:00	
7.	Jamie Mattson	LNR/Water	815-7863	10:02	
3.	Frank Lawrence III	LNR/Water	<i>[Signature]</i>		
4.	Victor Johnson	LNR/Water	393-2269	10:06	
5.	Hilary Cosentino	LNR/Water	56591-490468	10:00	
6.	Monika Lange	LNR/Water	296-5226	10:00	
7.	Frank Bob	LNR/Restoration	410-1783	10:00	
8.	Sgt. Ed Conway	LNPB <i>EC</i>	410-6813		
9.	Officer Jay Martin	LNPB	815 4261	1000	
10.	Officer David Savage	LNPB <i>[Signature]</i>			
11.	Gregg Dunphy	TWA <i>[Signature]</i>	414-1743	10:05	
17.	Ken Schacht	MSRC			
13.	<i>Chris Phair</i>	<i>LNR/Restoration</i>		10 AM	
14.	<i>[Signature]</i>				
15.	<i>Don Kruse</i>	<i>LNR/STCK ASS.</i>	961-0675	10:00	
16.					
17.					
18.					
19.					
20.					
21.					

INTEROFFICE MEMORANDUM

TO: JEREMY FREIMUND, WATER RESOURCES MANAGER
FROM: MONIKA LANGE, NATURAL RESOURCE ANALYST
SUBJECT: LUMMI NATURAL RESOURCES DEPARTMENT STAFF PARTICIPATION IN BP WORST
CASE TABLE TOP EXERCISE NOVEMBER 14-15, 2012
DATE: 1/18/13
CC:

The purpose of this memorandum is to document the participation of Lummi Natural Resources Department staff in the BP Worst Case Table Top Exercise on November 14-15, 2012.

The spill response exercise was a spill response drill by the BP refinery in Ferndale, WA with representatives from the US Coast Guard, the Alaska Tanker Company (ATC), and professional spill response companies present. The exercise simulated a release of oil from an ATC tanker at the BP dock.

Jeremy Freimund (Water Resources Manager), Victor Johnson (Natural Resources Specialist), and Frank Lawrence III (Natural Resources Specialist) participated in the two-day exercise. Jeremy was the Tribal-On-Scene Coordinator (TOSC) through the entire drill. Frank and Victor participated as deputy to the TOSC and in the operations section. Frank also had a shift in the "Truth" element of the drill and provided injects.

Attachment: Excerpt of the Exercise Manual



**BP SHIPPING
BP CHERRY POINT REFINERY
ALASKA TANKER COMPANY**

EXERCISE PLAN



BELLINGHAM, WA
November 14-15, 2012

**BP/ALASKA TANKER COMPANY
WASHINGTON 2012 EXERCISE**

3.0 EXERCISE SCHEDULE

* Green text in event tables indicates a shuttle run.

Tuesday November 13, 2012

Lakeway Best Western, 714 Lakeway Dr., Bellingham, WA 98229			
Time	Room	Activity	Attendees
0630	Sehome/Fairhaven	Breakfast	Away Team Members
0800	Whatcom	IAP Software	Planning & Log-Fin
0800	San Juan rooms	Operations Section Training	Operations Section
0800	Cascade	Command Section Training	Command & Command Staff including GPA/JIC
0950	Terrace	PIER	GPA/JIC
1200	Sehome/Fairhaven	Lunch	Away Team Members
1300	Whatcom	IAP Software	Operations & Command with Command Staff
1300	San Juan	Planning Section Training	Planning Section
1300	Cascade	Log-Fin Section Training	Logistics & Finance Sections
1300	Terrace	PIO/JIC	GPA/JIC
1630	Shuttles to ICP	OPTIONAL: Tour of ICP - 2 shuttles (40 people) depart from the front of the Lakeway Inn	All - optional
1700	Shuttles to ICP	OPTIONAL: Tour of ICP - 2 shuttles (40 people) depart from the front of the Lakeway Inn	All - optional
1730	Shuttles to Lakeway Inn	2 shuttles (40 people) depart from the front ICP to Lakeway Inn	All - optional
1800	Shuttles to Lakeway Inn	2 shuttles (40 people) depart from the front ICP to Lakeway Inn	All - optional

BP/ALASKA TANKER COMPANY WASHINGTON 2012 EXERCISE

Wednesday November 14, 2012

Time	Room	Activity	Attendees
0630	Sehome/Fairhaven	Breakfast	Away Team Members
0800	Incident Command Post (ICP) - 3888 Sound Way	Exercise begins Day 1	BP Cherry Point, ATC, State and Federal Participants and Contractors
0800	Whatcom	Exercise Orientation 1) <u>ATC review</u> — What is ATC's relationship with BP & BP Shipping (K. Hays) 2) <u>NWACP</u> --- What is it & what's in it that makes it unique. (USCG) 3) <u>The area</u> --- Review of the culture, environment & political climate of PAC NW 4) <u>201</u> — briefing on the 201 & status of the drill. (Deputy IC)	Away Team Members
0845		1 shuttle (20 people) departs from front of Lakeway Inn	NRDA Stakeholders and Trustees
0900	Fox Hall - 3985 Bennett Drive	NRDA Discussion	NRDA Stakeholders and Trustees
1140	Shuttles to ICP	2 shuttles (40 people) depart from front of Lakeway Inn	First Away Team
1200	ICP	First Away Team Arrives at ICP (lunch at ICP)	First Away Team
1200	Sehome/Fairhaven	Lunch	Second Away Team Members
1215	Shuttles to ICP from Fox Hall	1 shuttle (20 people) departs from Fox Hall to the ICP	NRDA Stakeholders and Trustees
1300	Shuttles to ICP	3 shuttles (60 people) depart from front of Lakeway Inn	Second Away Team Members
1345	ICP	Begin integrating into exercise	Second Away Team Members
1700	ICP	Day 1 ends	All
1715	Shuttles to Lakeway Inn	3 shuttles (60 people) depart from the front ICP to Lakeway Inn	All
1745	Shuttles to Lakeway Inn	3 shuttles (60 people) depart from the front ICP to Lakeway Inn	All
1800	Sehome/Fairhaven	Social hour followed by dinner	All

**BP/ALASKA TANKER COMPANY
WASHINGTON 2012 EXERCISE**

Thursday, November 15, 2012

Time	Room	Activity	Attendees
0630	Sehome/Fairhaven	Breakfast	Away Team Members
0645	Shuttles to ICP	3 shuttles (60 people) depart from the front of the Lakeway Inn (breakfast available at the ICP)	Away Team Members
0715	Shuttles to ICP	3 shuttles (60 people) depart from the front of the Lakeway Inn	Away Team Members
0800	ICP	Begin playing Day 2	All
1600	ICP	End playing Day 2/Begin Hot Wash of exercise	All
1700	ICP	End of Exercise	All
1715	Shuttles to Lakeway Inn	3 shuttles (60 people) depart from the front ICP to Lakeway Inn	All
1745	Shuttles to Lakeway Inn	3 shuttles (60 people) depart from the front ICP to Lakeway Inn	All

INTEROFFICE MEMORANDUM

TO: JEREMY FREIMUND, WATER RESOURCES MANAGER
FROM: MONIKA LANGE, NATURAL RESOURCE ANALYST
SUBJECT: **NOVEMBER 14, 2012 NATURAL RESOURCES DAMAGE ASSESSMENT (NRDA) TRAINING
AT THE BP OIL SPILL RESPONSE TABLE TOP DRILL**
DATE: 11/21/12
CC:

The purpose of this memorandum is to document the attendance at the NRDA training on November 14, 2012.

Ben Starkhouse (Harvest Manager) and Monika Lange (Natural Resources Analyst) attended the NRDA training provided at the BP Worst Case Table Top Oil Spill Response Drill from 8 am to 12 pm. See attached agenda for details.

BP SHIPPING / BP CHERRY POINT REFINERY / ALASKA TANKER COMPANY
RESPONSE EXERCISE

NATURAL RESOURCE DAMAGE ASSESSMENT TRAINING

NOTICE

WHEN - November 14, 2012 - 8 AM to NOON

WHERE - Former Olympic Coordination Center, 3888 Sound Way, Bellingham WA
(Room - FOX HALL)

REFRESHMENTS / LUNCH PROVIDED -

INVITEES

State Trustees:

WA Department of Ecology
WA State Parks and Recreation Commission
WA Department of Fish & Wildlife
WA State Department of Natural Resources
WA State Department of Health
WA State Department of Archaeology & Historic Preservation

Federal Trustees:

National Marine Fisheries Service
US Fish and Wildlife Service
National Oceanic and Atmospheric Administration

Lummi Nation
Swinomish Tribe
Nooksack Tribe
Tulalip Tribe
Suquamish Tribe

BP

SCENARIO

At 2:00 PM on November 14, 2012 two tankers containing full loads of crude oil collided near the Cherry Point Refinery dock and sank. Crude oil immediately began leaking into Puget Sound. It is now 5:00 PM. The crude oil continues to leak from one or both of the sunken vessels.

AGENDA

BP Shipping / BP Cherry Point Refinery / Alaska Tanker Company Response Exercise
Natural Resource Damage Assessment Training –(November 14, 2012 8AM – NOON) –
Bellingham WA – Notice, Scenario and Agenda

I. Natural Resources that Could be Injured / Baseline (8-9 AM)

(Dr. Gordon Robilliard – Cardno ENTRIX)

A. Natural Resources with High Priority Concern

- Mammals
- Birds
- Fish and shellfish
- Plants (algae and sea grass)
- Protected, threatened and endangered species
- Recreational / commercial species
- Habitats
- Cultural Sites
- Recreational Sites and Uses

B. Baseline for Natural Resources of Concern

- Existing baseline
- Location of baseline
- Availability of baseline
- Baseline deficiencies

II. Natural Resource Damage Assessment Legal Issues (9-10 AM)

(George Green – Arnold & Porter LLP / Bob Taylor – United States Department
of Commerce, National Oceanic and Atmospheric Administration, Office of
General Counsel, Natural Resources Section)

A. Issues from the Responsible Party Perspective

B. Issues from the Trustee Perspective

Break (10–10:15 AM)

III. Assessing Injuries to Natural Resources from Incident (10:15-11:15AM)

(Dr. Ralph Markarian – Cardno ENTRIX)

A. Baseline sampling

- What sampling?
 - Prior contamination
 - Released crude oil sample
 - Natural resources
- Who samples?
- Joint samplings?

B. QA / QC and Chain-of-Custody

BP Shipping / BP Cherry Point Refinery / Alaska Tanker Company Response Exercise
Natural Resource Damage Assessment Training –(November 14, 2012 8AM – NOON) –
Bellingham WA – Notice, Scenario and Agenda

- C. Laboratory analysis
- D. Sampling agreements
- E. Data and Information Management
- F. Other

Relationship to Response

Sharing vessels /planes with Response

Sharing samples with Response

IV. Beyond This Training (11:15 – NOON)
(Jeff Conrad – BP America Inc. Law Department)

- A. Trustees' thoughts
- B. Cardno's thoughts
- C. Legal's thoughts
 - Responsible Party's counsel
 - Trustee's counsel
- D. BP's thoughts

INTEROFFICE MEMORANDUM

TO: JEREMY FREIMUND, WATER RESOURCES MANAGER
FROM: HILARY COSENTINO, WATER RESOURCES TECHNICIAN III
SUBJECT: ON-LAND OIL SPILL ON FEBRUARY 22, 2012
DATE: 3/5/12
CC:

The purpose of this memorandum is to summarize the response of the Water Resources Division to a minor on-land oil spill on February 22, 2012.

A small oil slick (approximately 4 ft by 1 ft) was noticed in the east ditch along Chief Martin Road at the Howell Test Well site during a scheduled monitoring well run by Jamie Mattson, Water Resources Specialist I, and Hilary Cosentino, Water Resources Technician III, on February 22, 2012. A closed motor oil container was determined to be the source of contamination. The container was removed and surface oil was cleaned up using six oil-only absorbent pads by the Water Resources Division staff. The container and waste materials were properly disposed at Disposal of Toxics in Bellingham, WA on February 27, 2012.

INTEROFFICE MEMORANDUM

TO: JEREMY FREIMUND, WATER RESOURCES MANAGER
FROM: MONIKA LANGE, NATURAL RESOURCE ANALYST
SUBJECT: MOTOR OIL ON STREETS OF SANDY POINT HEIGHTS MARCH 26, 2012
DATE: 3/26/12
CC: LIAM CARNAHAN, LUMMI TRIBAL SEWER AND WATER DISTRICT MANAGER

The purpose of this memorandum is to summarize the response of the Water Resources Division to an on-land oil spill reported on March 26, 2012.

On March 26, 2012, the Sanitary Service Company notified the Lummi Tribal Sewer and Water District (LTSWD) that they had observed oil on several streets including Moresby Way and Cypress Way at Sandy Point Heights and that it threatened to enter storm drains. LTSWD notified the Lummi Water Resources Division, and Jeremy Freimund authorized Monika Lange, Victor Johnson (GIS/Water Resources Technician III) and Hilary Cosentino (Water Resources Technician III) to investigate and if possible to contain/clean up the oil.

Arriving at approximately 11 am at Sandy Point Heights, we found a trail of oil sheen on Orcas Way. It was apparent by the size and spacing of the oil sheen that the oil had dripped from a car or truck. We followed the oil along Orcas Way to Decatur Drive to Moresby Way and identified the driveway of 4455 Moresby Way, Ferndale, WA 98248 as the starting point of the trail (see images). Returning to the LNR offices, we followed the trail as far as Slater Road.

The amount of oil at each drip was too small to be recoverable. The oil will enter storm water runoff with the forecast rains.

Jeremy directed me to address a letter to the resident of 4455 Moresby Way in order to notify them of the situation, which was mailed on March 27, 2012.

*3/30/2012
Mr. Dave Baxter, resident
@ 4455 Moresby called and
stated that the oil was
from his friend's van
and they planned to get
it repaired on 3/31/2012.
Jeremy*



Oil Sheen on the bottom of the drive way at 4455 Moresby Way, Ferndale, WA 98248



The biggest oil stains were found at the bottom of the driveway. Oil stains leading away from the driveway were approximately 1-2 feet in diameter.



LUMMI INDIAN BUSINESS COUNCIL

2616 KWINA ROAD • BELLINGHAM, WASHINGTON 98226 • (360) 384-1489

Resident
4455 Moresby Way
Ferndale, WA 98248

March 27, 2012

Re: Notification of Oil Leak Contaminating Streets in Sandy Point Heights

Dear Resident,

I am writing to notify you that on March 26, 2012 an extensive trail of motor oil was discovered to originate at your driveway at 4455 Moresby Way.

The Lummi Tribal Sewer and Water District was alerted on March 26, 2012 by the Sanitary Service Company that oil was observed on several streets at Sandy Points Heights and was threatening to enter storm water and sewer drains. The Lummi Natural Resources Department investigated the report and discovered extensive oil drops that went from Slater Road to the driveway at 4455 Moresby Way. The oil is apparently from a leaking car or truck. It was not possible to recover the oil and it will enter storm water runoff with the current rains.

Oil poses risks in even small amounts to ground and surface waters. Please address and repair the leaking vehicle as soon as possible. Please call me at 384-2212 if you any questions or comments regarding this matter.

Sincerely,

Jeremy Freimund, P.H.

Lummi Water Resources Manager

INTEROFFICE MEMORANDUM

TO: JEREMY FREIMUND, WATER RESOURCES MANAGER
FROM: MONIKA LANGE, NATURAL RESOURCES ANALYST
SUBJECT: ON-LAND OIL SPILL AT BOAT SHED AT GOOSEBERRY POINT 6/13/12
DATE: 6/13/12
CC:

On June 13, 2012, I received a telephone call at 10:35 am from Barry Hanowell, the Fisherman's Cove Dock Manager, that a 50-gallon on-land oil spill had occurred at the old boat shed at the back of the boat storage area at Gooseberry Point, and that he had run out of absorbent pads. After informing Jeremy about the call, Frank Lawrence III and I retrieved one bag of pads (100 count), plastic bags, and protective clothing from the Natural Resource Department's Spill Response Container and delivered it to the spill site.

At the boat storage area, Barry showed us an oil drum that had been pushed over by an unknown person in one of the dilapidated sheds where the new Dislocated Fishers Building will be erected. Barry told us that he had already used up the 100-pad bale that I left at the dock last August for minor incidents and that he had no equipment to clean up the sizable oil spill. As nobody was taking care of the situation and Barry left, Frank and I spread out one bale of pads and the pads from the Water Resources Division's Jeep spill kit (approximately 150) on the oil that was standing at least one inch deep in some areas. Frank secured the area upon leaving with colored tape (wetland tape). It was not clear if some of the dry wall pieces and insulation wads on the ground were placed there after the spill to stop it from entering adjacent areas.

Barry told us when we called that they would not be able to dispose of the used pads. Frank and Jamie Mattson called the Whatcom County Disposals of Toxics (DOT) facility to ensure that we could dispose of the soiled pads at the facility. Frank and I returned to the site after lunch (approximately 1:30 pm) and collected the soiled pads and wiped up oil that was still visible. At approximately 2:45 pm, we loaded two bags of soiled pads and disposed of them at the DOT facility, which will send us an invoice for the disposal. We did not dispose of the barrels (a second one was in another part of the shed) or the soiled building materials. Besides the 150 pads, two sets of disposable rain gear, two sets of gloves, and two heavy duty plastic bags were used for the clean-up.

Attached are pictures of the spill and the cleaned area.



Extend of Oil Spill in the Shed



Barrel of Oil



Some oil had flowed in the adjacent gravel and grass lot.



Oil Extended to the 'Wall'.



Absorbent Pads on the Spill.



Tape to Secure the Area.



Front Part of the Oil Spill Area
after Removal of the Absorbent
Pads.



Back of the Shed after Removal
of the Absorbent Pads.



MEMORANDUM

DATE: October 4, 2012

TO: Jeremy Freimund, P.H., Water Resources Manager

FROM: Hilary Cosentino, Water Quality Technician III

SUBJECT: Sunken Skiff at Fisherman's Cove

The purpose of this memorandum is to report Lummi Water Resources Staff's response to a sunken skiff at Fisherman's Cove (Gooseberry Point, Lummi Indian Reservation) on the morning of October 4, 2012.

As you know, on October 4, 2012 at around 0735 you received a call from the Department of Ecology (DOE) reporting the US Coast Guard had notified them of a potential gas spill from a sunken skiff, with an attached gas tank, at Fisherman's Cove. At 0840 you asked Victor Johnson and me to investigate. Victor and I spoke with the Lummi Police Department at 0850 and were informed that they were also notified and planned to respond.

We arrived on site at 0900 where we met Berry, the Gooseberry Point Dock Operator. Berry reported that the skiff was not present at the end of his shift the previous night (October 3, 2012) but discovered the sunken vessel at approximately 0820 the morning of October 4, 2012. The 10-15 ft skiff was tied at both the bow and stern to the NE side of the Gooseberry Point dock and was submerged in 10 to 15 ft of water with the tide coming in (Figure 1). We were unable to collect any identification information from the submerged boat, but Berry suspected he knew who owned the vessel.

A gas container tethered to the boat was floating on the water's surface (Figure 2). There was a visible sheen on the surface of the water but it was not clear whether the gas container was the source. The gas tank did not appear to be leaking nor did there appear to be any contaminants entering the water due to the boat itself or its motor. The gas container was out of reach and could not be retrieved.

Attached to the boat was a fishing net that had drifted to the surface and towards the neighboring Lummi Island ferry dock. Ferry crewmembers had picked up the majority of the net and placed it on a lower platform of the ferry dock but portions of the net were left drifting around the dock's pillars (Figure 3).

While on site Lummi Natural Resources Enforcement Sergeant Ed Conway responded and informed us that the Lummi Police Department would remove the fisherman's net and gas tank. At 11:30 October 4, 2012 we were notified by the Sergeant that the net and gas tank had been removed. The gas tank contained approximately a gallon and a half of gasoline upon removal. Sergeant Conway stated that the Lummi Police Department would be responsible for identifying boat ownership but efforts would be suspended until low tide. Lummi Police would contact the boat owner who would be responsible for retrieving the vessel. We have asked the Police Department to notify Lummi Natural Resources when the skiff has been removed.



Figure 1. Bow of sunken skiff at Fisherman's Cove dock.



Figure 2. Floating gas container tethered to sunken skiff.



Figure 3. Fish net extending from sunken skiff to pile on neighboring ferry dock.